

### Abstract of the Disclosure

A method for adaptively partitioning a buffer in a shared buffer switch is provided. The buffer partitioning method for a shared buffer switch which has a plurality of input ports, a plurality of output ports, and a shared buffer, the  
5 method for determining whether or not to store a cell, which is newly received through one of the input ports, in the shared buffer comprises the steps of (a) determining a buffer area of the shared buffer in which the newly received cell is stored; (b) determining a cell discard threshold with respect to the total number of cells stored in the shared buffer and the changing rate, with respect to time,  
10 of the total number of the cells; and (c) determining whether or not to store the newly received cell in the shared buffer, by comparing the number of cells stored in the buffer area in which the newly received cell is to be stored, with the cell discard threshold. In the method, using a cell discard threshold which is determined with respect to the total number of cells stored in a shared buffer  
15 and the changing rate of the total number of cells, it is determined whether or not to store a newly received cell. Therefore, the shared buffer switch adaptively handles changes in inflowing traffic volume and changes in outflowing cell traffic volume such that cell loss due to cell discard is effectively prevented.